



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/816,677

04/02/2004

Kinh-Luan (Lenny) Dao

03-302

9708

27774 7590 09/22/2008

MAYER & WILLIAMS PC
251 NORTH AVENUE WEST
2ND FLOOR
WESTFIELD, NJ 07090

EXAMINER

GHALI, ISIS A D

ART UNIT

PAPER NUMBER

1611

MAIL DATE

DELIVERY MODE

09/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/816,677	Applicant(s) DAO ET AL.	
	Examiner Isis A. Ghali	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 2-4,6-8,12-15,20,21,24,25,27-30 and 33-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,9-11,16-19,22,23,26,31,32 and 39-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The receipt is acknowledged of applicants' request for reconsideration filed 06/17/2008.

Claims 1-42 are pending.

Election/Restrictions

1. Applicant's election with traverse of species: solvent assisted adhesive, medical article comprising microparticles, microspheres, biostable microparticles, therapeutic agent admixed in powder form with microparticles, therapeutic agent adhered to the adhesive region, medical article comprising adhesive and therapeutic agent, and stent, claims 1, 5, 9-11, 16-19, 22, 23, 26, 31, 32, 39-42 in the reply filed on 12/03/2007 is acknowledged. Applicants argue that the species of claims 12 and 13 and species of medical articles in section 7 of the restriction requirement filed 11/01/2007 are not mutually exclusive and overlapping in scope. This is not found persuasive because the search system and the focus of the invention are completely different, requiring an undue burden on the patent examiner. While searches may seem to be overlapping, however extensive since the patent examiner searches the databases mostly literally. There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The Species require a different field of search

Art Unit: 1611

(e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 2-4, 6-8, 12-15, 20, 21, 24, 25, 27-30, 33-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/03/2007.

Claims 1, 5, 9-11, 16-19, 22, 23, 26, 31, 32, 39-42 are included in the prosecution.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5, 9, 10, 16-19, 22, 23, 26, 31, 32, 40, and 41 rejected under 35 U.S.C. 102(b) as being anticipated by US 6,491,617 (617).

US '617 disclosed medical device including stent of biocompatible material comprising plurality of exogenous storage structure, that reads on microparticles, and particles of therapeutic agent on its surface (abstract; col.5, lines 3-10, 22-24). The reference further disclosed that plurality of particles of therapeutic agents can be applied to different portions of the biocompatible material (col.16, line 54 till col.17, line 26), this teaching also reads on therapeutic agent and microparticles applied to different portion of the device. The therapeutic particles are deposited on the surface of the device by dipping the device in dispersion of the particles, followed by drying (col.16, lines 45-46), i.e. not spray dried microparticles and reads on solvent assisted adhesive as disclosed by applicants. The therapeutic particles are bound to the device surface using same method of binding the exogenous storage structure including using cross-linker (col.12, lines 17-60), which all disclosed by applicants in pages 4-5 as adhesives. The therapeutic agents include microscopic macromolecules including proteins, polypeptides and nucleic acids having high molecular weight greater than 25,000 amu (col.10, lines 53-63).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1611

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being obvious over US '617.

The teachings of US '617 are previously discussed as set forth in section 4 of this office action.

Although US '617 teaches microscopic molecules, however, the reference does not explicitly teach the particle size as instantly claimed by claim 11.

Applicants failed to show unexpected results obtained from the claimed particle diameters, therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have particles on the adhesive layer covering medical devices with a diameter between 0.1 to 50 μm , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges and dimensions involves only routine skill in the art. *In re Aller* 105 USPQ 233.

8. Claims 39 and 42 are rejected under 35 U.S.C. 103(a) as being obvious over US '617 in view of US 6,545,097 ('097).

The teachings of US '617 are previously discussed as set forth in section 4 of this office action.

Although US '617 teaches therapeutic agents coated on the medical device, however, the reference does not teach covering the therapeutic agent by disintegrable layer as instantly claimed by claimed 39 and 42.

US '097 teaches implantable device such as stent covered with biocompatible degradable polymer comprising therapeutic agent and covered with sheath to prevent premature therapeutic agent release (abstract; col.5, lines 19-23; col.14, lines 20-26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide medical device such as stent covered with therapeutic agent and particles as disclosed by US '617, and further provide biocompatible degradable polymer covering over the therapeutic agents and the microparticles as disclosed by US '097 because US '097 teaches that such covering prevents premature therapeutic agent release, with reasonable expectation of having stent covered with therapeutic agent and microparticles and further covered with biocompatible degradable polymer covering wherein premature release of the therapeutic agents is successfully prevented.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis A. Ghali whose telephone number is (571) 272-

Art Unit: 1611

0595. The examiner can normally be reached on Monday-Thursday, 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571) 272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Isis A Ghali/
Primary Examiner, Art Unit 1611

IG